

How Aetna can help hospitals and physicians improve care

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A data warehouse and two programs

- Data warehouse: 8 terabytes, all medical, Rx and other claims, demographics
- Program for Hospitals:
 - Identify potentially life-threatening complications during or after admission
- Program for Physician offices:
 - Identify situations of patient noncompliance, substance abuse or errors of omission and commission in care

Aetna's Hospital Quality Review

- Unexpected but important clinical events during admission or after discharge *for which there are widely accepted preventive clinical strategies*
- Feedback to hospital details of cases to determine if and what type of improvements are possible
- Starting point for data-driven medical staff CME and for data-driven QI activities required by JCAHO

“Outcome” Measures

- *Outcome* measures include potentially preventable and potentially fatal adverse events
 - Peri/post-operative myocardial infarction
 - Deep vein thrombosis - pulmonary embolism
 - Clostridium difficile infections
- We look for evidence of these events *both during the hospitalization and post-discharge*

“Process” Measures

- *Process* measures include the use of two classes of drugs known to prolong the lives of most patients with congestive heart failure
 - ACE Inhibitors/Angiotensin II Receptor Blockers on or after discharge
 - Beta Blockers on or after discharge

Description

- Profiles care in the hospital treatment setting
 - Inpatient
 - Ambulatory
- Measure development
 - accepted clinical guidelines
 - standards of care
- Minimum participation criteria
 - for meaningful measurement hospitals must treat enough patients for us to recognize trends

Longitudinal Design

- Post-discharge markers of quality
 - Integrated data warehouse allows for more extensive and comprehensive acquisition of data.
 - ◆ Re-admissions, admissions to other hospitals, activity in physician offices, pharmacy and lab data
 - Provides information otherwise unavailable to hospitals
 - ◆ Preadmission and post discharge information
 - ◆ Comparative information

Case Mix Adjustment

- Expected rate calculation
 - Adjusted for patient demographics (i.e. age) and relevant clinical factors (i.e. severity of DRG-Diagnosis Related Group)

Patient List(s)

- Identify specific cases with unexpected outcomes:
 - ◆ deep vein thrombosis/pulmonary embolism
 - ◆ acute myocardial infarction/inpatient surgery
 - ◆ acute myocardial infarction/ambulatory surgery
 - ◆ CHF with no ACEI/ARB or beta blocker
- Facilitates retrospective analysis and data driven Quality Improvement (QI) for JCAHO accreditation

Hospital Feedback

- “Keep the report coming! Please send our patient lists!”
 - ◆ Hospital QI Officer

- “This is great information. Nobody else is doing anything like this.”
 - ◆ Hospital CEO

Patient Safety Alerts and Warnings

Omission and Commission

Patient Compliance

Substance Abuse



Are Patients Managed Well?

Are Patients Compliant?

- Diagnosis and treatment history from medical, pharmacy, provider and laboratory claims
- Identify standards of care for common diseases
- Compare treatment of patients with these diseases with standard of care
- Identify and list discrepant situations, including substance abuse/doctor shopping and noncompliance with chronic medications

Patient Identification

- Medical errors and poor quality health care: overuse, underuse and misuse (Institute of Medicine)
- Aetna data suggests which patients have which diseases and what treatments they've had
- Aetna identifies more than 100,000 patients every month where treatment review may be indicated
- Every one of these situations has been brought to the attention of the patient's PCP or managing specialist
- Exploring email and web delivery of this information to doctors

Summary

- Large data warehouse facilitates:
 - Identification of unexpected outcomes
 - Identification of process of care issues
 - Feedback to hospitals and doctors with specific, actionable information
 - Actions should improve process and outcomes of care in New Jersey